Amendments to the Specification:

Please replace paragraph [0020] with the following amended paragraph:

[0020] Figure 2 shows a receiving head machining head 15 with an additional temperature monitoring system. Located in this case in the cavity 16 is a further convergent lens 8. The latter is required in order to be able to produce a collimated beam path so that further optical elements can be coupled in. The collimated radiation downstream of the converted lens 8 is focused onto the point of impingement 12 below the glass ball 3 by means of the convergent lens 2. The thermal radiation from the welding site is deflected by a beam portion that is located in the collimated beam path via the beam splitter 9, and focused onto a pyrometer 11 via the convergent lens 10 arranged outside the mechanical mount.